

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/010,164	10/010,164 11/13/2001		Simon Muff	MAS-FIN-200	7203	
24131	7590	05/07/2004		EXAMINER		
LERNER A	AND GREE	NBERG, PA	MITCHELL, JAMES M			
P O BOX 24 HOLLYWO		3022-2480		ART UNIT	PAPER NUMBER	
	,			2827		
				DATE MAILED: 05/07/2004	DATE MAILED: 05/07/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

				///
		Application No.	Applicant(s)	
		10/010,164	MUFF ET AL.	
	Office Action Summary	Examin r	Art Unit	
		James M. Mitchell	2827	
Period fo	The MAILING DATE of this communication or Reply	n appears on the cover shet wit	h the correspond nc add	ress
A SHI THE I - Exter after - If the - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR F MAILING DATE OF THIS COMMUNICAT asions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communicati period for reply specified above is less than thirty (30) days period for reply is specified above, the maximum statutory re to reply within the set or extended period for reply will, by eply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	ION. FR 1.136(a). In no event, however, may a re on. , a reply within the statutory minimum of thirty period will apply and will expire SIX (6) MONT statute, cause the application to become AB/	ply be timely filed r (30) days will be considered timely. I'HS from the mailing date of this com ANDONED (35 U.S.C. § 133).	nmunication.
Status				
1)⊠	Responsive to communication(s) filed on	15 January 2004.		
,	•	This action is non-final.		
	Since this application is in condition for a		ers, prosecution as to the r	merits is
,	closed in accordance with the practice ur	•	• •	
Dispositi	on of Claims			
5)□ 6)⊠	Claim(s) 1-18 is/are pending in the application of the above claim(s) is/are with Claim(s) is/are allowed. Claim(s) 1-18 is/are rejected. Claim(s) is/are objected to.			
8)□	Claim(s) are subject to restriction	and/or election requirement.		
Applicati	on Papers			
10)□	The specification is objected to by the Exa The drawing(s) filed on is/are: a) Applicant may not request that any objection to Replacement drawing sheet(s) including the of The oath or declaration is objected to by the	accepted or b) objected to be to the drawing(s) be held in abeyand correction is required if the drawing(s)	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFF	` ,
riority u	ınder 35 U.S.C. § 119			
a)[Acknowledgment is made of a claim for for All b) Some * c) None of: 1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International Beee the attached detailed Office action for	ments have been received. ments have been received in Ap e priority documents have been dureau (PCT Rule 17.2(a)).	oplication No received in this National S	tage
Attachment		🗂		
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-94 nation Disclosure Statement(s) (PTO-1449 or PTO/S r No(s)/Mail Date	8) Paper No(s)	ummary (PTO-413) l/Mail Date formal Patent Application (PTO-1 	152)

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kozuka (US 5,691,570).

Kozuka (Fig 21; Col. 9, Lines 29-36) discloses a component placement method and integrated circuit chip comprising inherently providing an integrated chip containing a chip body (12) having an upper side an a under side, and at least two groups of metallic bonding pads (20, 16; 16, 20; via integral with metal 449) disposed on one of said upper side (Left portion) and underside (Right portion) of said chip body, wherein the first group (20,16) is inherently ordered in the standard pin/ wiring assignment or configuration (via "normal configuration"; Col. 1, Lines 9-13) and a second group (16, 20) of said at least two groups of said metallic bonding pads inherently ordered in the mirror-image pin assignment or wiring configuration (via "reverse configuration), the mirror-image wiring configuration being mirror-inverted in relationship the standard wiring configuration (20,16; 16,20) and at least groups of metallic bonding pads (16) disposed on one of said upper side (Left portion) and said under side (Right portion) of

said chip body, first group (122) of said at least two groups of said metallic bonding pads ordered in the standard assignment, a second group (124) said least two groups said metallic bonding pads ordered in the mirror-image pin assignment; and using the IC circuit for placing components on at least one side of a printed circuit board using surfaces mounting technique (Claim 6, line 63-64).

With respect to the chip body being able "to be connected optionally to one of a standard wiring configuration for a standard pin assignment and to a mirror image wiring configuration for a mirror image pin assignment [etc]," the prior art is capable of performing the functions (Col. 1, Lines 9-13). The courts have held that the recitation that an element is "capable of" performing a function is not a positive recitation, but only requires the ability to so perform. In re Hutchinson, 69 USPQ 138 (CCPA 1946).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozuka (US 5,691,570) as applied to claim 1.

Kozuka (Fig 21) further discloses the standard wiring configuration and the mirror-image wiring configuration in each case extends on opposite sides of the chip body (via Left side and Right side); and the first group is disposed in a first row and said second group is disposed in a second row next to each other along two straight lines

running parallel to each other; wherein the pads of the first and second row have a same spacing in relation to directly neighboring bonding pads (via 448, 449); with pins of the metallic pads of the first and second group are in a same direction; and the pads of the first and second group are lying in a common row lie along a straight line.

Kozuka does not appear to disclose the standard pin is realized by a positioning of said chip body first position, the mirror- image pin assignment realized by a positioning of said chip body in a second position and once in the second position can be transformed into the first position by rotation of said chip according chip body said upper side or said underside chip body or by translational movement said chip body along straight running parallel said upper side or to said underside said chip body wherein from a transformation from the second position into the first position, and vice versa, in each case, rotating said IC chip body by one of 90, 180 and 270 degrees is required.

With respect to product by process claim of "the standard pin is realized by a positioning of said chip body first position, the mirror- image pin assignment realized by a positioning of said chip body in a second position and once in the second position can be transformed into the first position by rotation of said chip according chip body said upper side or said underside chip body or by translational movement said chip body along straight running parallel said upper side or to said underside said chip body wherein from a transformation from the second position into the first position, and vice versa, in each case, rotating said IC chip body by one of 90, 180 and 270 degrees is required," or "pins... assigned in a same direction." The product is the same as that of

the prior art. [E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Response to Arguments

Applicant's arguments filed January 15, 2004 have been fully considered but they are not persuasive.

First, applicant contends that Kozuka does not show at least two groups of metallic bonding pads citing Fig. 16 for support, because allegedly it contains the same number of pads as pins. Besides the fact that Fig 21, which was relied on in the rejection is a different embodiment than Fig. 16, applicant's claim language does not preclude pads and pins from having a different number as argued by applicant.

Secondly, applicant attempts to distinguish its invention by stating that mounting of the chip to either a standard or mirror image orientation is achieved by rotating the chip, is immaterial, because that process limitation did not structurally limit the product invention as claimed and was not further included in the method claim. Likewise, applicant's arguments that the chip of Kozuka cannot be mounted in both the standard and mirror-image configuration is found unpersuasive for the reasons stated above.

Lastly, applicant asserts on page 11 of its remarks that "the inclusion of two groups of bonding pads in different configurations on a single chip is inventive."

Application/Control Number: 10/010,164 Page 6

Art Unit: 2827

Examiner respectively disagrees, since that invention is explicitly disclosed by Kozuka (Fig. 21) as indicated in the office action.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Mitchell whose telephone number is (571) 272-1931. The examiner can normally be reached on M-F 6:30-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/010,164

Art Unit: 2827

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 19, 2004

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Page 7